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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/897,790	06/29/2001	Peter Stanforth	1710.002	1219

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EXAMINER	
CORSARO, NICK	

ART UNIT	PAPER NUMBER
2684	

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/897,790	STANFORTH, PETER	
	Examiner	Art Unit	
	Nick Corsaro	2684	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 January 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *32-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *32-34* is/are allowed.

6)☒ Claim(s) *35-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *09/01,04/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

RESPONSE TO AMENDMENT

Examiner Note

1. Several clerical errors have occurred in the current case that will cause delays when the application goes to issue.

a). The preliminary amendment filed 09/03/2002 cancels claims 1-11. In phone conversations with Joseph Buczynski, Attorney for the Applicant, it was indicated that claims 12-31 were supposed to be cancelled in that amendment. The current response also indicates that only claims 32-40 are the only claims pending in this application. However, no official document entered in file cancels claims 12-31. In order to expedite post issue processing, the examiner recommends filing a paper officially canceling claims 12-31.

b). In the preliminary amendment of 09/03/2002, claim 32 was partially printed on the cover page of amendment. In order to expedite post issue processing the examiner recommends that in a subsequent response a clean set of the pending claims be submitted. The pending claims should start on a separate page from other parts of the response.

Response to Arguments

2. Applicant's arguments filed 01/04/2005, concerning claims 35-40 have been fully considered but they are not persuasive.

The applicants features in the claims, wherein, an ad-hoc radio system has a series of remote radio terminals each comprising a radio transceiver and a control processor, where the processor determining a routing path of a call, for communicating with other said radio terminals, and for establishing the respective said radio terminal as a hop for other said radio

terminals during a call-connection; at least one gateway in operative communication with said series of remote radio terminals; a plurality of wireless routers in operative connection between said series of remote terminals and said at least one gateway for wirelessly interconnecting said series of radio terminals and for wirelessly interconnecting said series of radio terminals to said at least one gateway, whereby said remote radio terminals may indirectly communicate with each other through one or more said wireless routers and said at least one gateway, reads upon van Valkenburg in vie of Rautiola, as follows.

Van Valkenburg is discussing a method of routing communications in an ad-hoc network that includes a plurality of remote terminals where when a connection is to be established from one remote terminal to another the connection can be established directly between two of the terminals if they are in proximity or via any number of the other terminals acting as routers if the sending terminal and receiving terminal are separated such that they cannot directly communicate. Therefore, van Valkenburg discloses the features of "**an ad-hoc radio system has a series of remote radio terminals each comprising a radio transceiver and a control processor**". Van Valkenburg discussing that in order to act as routers each of the terminals holds a routing table to indicating or finding the other terminal based on probes or previously stored information. Therefore, van Valkenburg disclosed the limitation of "**a control processor, where the processor determining a routing path of a call, for communicating with other said radio terminals, and for establishing the respective said radio terminal as a hop for other said radio terminals during a call-connection**". Van Valkenburg discusses an access point in connection with the terminals allowing connection to a wide area communications system, and the fact that each of the terminals can act as routers and connections can be

established amongst the terminals directly, via another terminal acting as a router, or via the access point to the wide area network or to other terminals in the ad-hoc network. Therefore, Van Valkenburg is disclosing the limitation of "**at least one access way in operative communication with said series of remote radio terminals; a plurality of wireless routers in operative connection between said series of remote terminals and said at least one access way for wirelessly interconnecting said series of radio terminals and for wirelessly interconnecting said series of radio terminals to said at least one access way, whereby said remote radio terminals may indirectly communicate with each other through one or more said wireless routers and said at least one access way**".

Van Valkenburg disclosed all the limitations of the invention except at least one gateway. However, Van Valkenburg was disclosing and access point that acted as an intermediary between two different types of networks, i.e., essentially a gateway. As a result, Van implies the use of a gateway for changing protocols. Van Valkenburg was modified by Rautiola to show that it would be obvious to one of ordinary skill in the art to modify Van Valkenburg and use a gateway in the ad-hoc network of Van Valkenburg. Rautiola discussed a HYPERLAN using a gateway, a HYPERLAN being analogous technology to ad-hoc networks that has a series of wireless terminals that can communicate with each other directly or indirectly. Further Rautiola discussed in the background of the reference that is would be advantageous to allow the ad-hoc terminals access to the Internet. Thus Rautiola give motivation to modify Van Valkenburg with analogous art.

As a result, the arguments are not persuasive because, the argued limitation read upon Van Valkenburg in view of Rautiola

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Valkenburg et al. (6,775,258) in view of Rautiola et al. (5,956,331).

Consider claim 35, Van Valkenburg discloses an ad-hoc radio system (see col. 1 lines 5-8). Van Valkenburg discloses a series of remote radio terminals each comprising a radio transceiver and a control processor, said control processor comprising software means for determining a routing path of a call, for communicating with other said radio terminals, and for establishing the respective said radio terminal as a hop for other said radio terminals during a call-connection (see col. 1 lines 40-61, col. 2 lines 53-67, col. 3 lines 1-5, col. 3 lines 11-20, col. 3 lines 34-44). Van Valkenburg discloses at least one access way (22, figure 8) in operative communication with said series of remote radio terminals (see col. 3 lines 5-20, col. 9 lines 32-47). Van Valkenburg discloses a plurality of wireless routers (18-3/16, figure 8) in operative connection between said series of remote terminals and said at least one access point for wirelessly interconnecting said series of radio terminals and for wirelessly interconnecting said series of radio terminals to said at least one access way (see col. 9 lines 32-46, col. 5 lines 3-28, and col. 2 lines 52-61, where Van Valkenburg discloses any of the devices can be a source node or a router). Van Valkenburg discloses said remote radio terminals may indirectly communicate with each other through one or more said wireless routers and said at least one access way (see

col. 3 lines 5-44, col. 5 lines 2-29, col. 9 lines 32-67, col. 10 lines 1-57, where Van Valkenburg discusses that the nodes can route to each other via other nodes and to the gateway and to other nodes).

Van Valkenburg discloses an access point or access way from the wireless ad-hoc network to the wire line Internet (see col. 9 lines 65-67, col. 10 lines 1-16), however does not specifically disclose a gateway. Rautiola discloses a gateway (1, figure 1) (see col. 7 lines 17-44, col. 8 lines 60-67, and col. 9 lines 1-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Van Valkenburg, and have a gateway, as taught by Rautiola, thus allowing the nodes to be connected to the internet when they are in a hierarchical tree structure where nodes are situated under other nodes with respect to their addresses, as discussed by Rautiola (col. 3 lines 42-64).

Consider claim 36 and 39, Van Valkenburg discloses an ad-hoc radio system (see col. 1 lines 5-8). Van Valkenburg discloses a series of remote radio terminals each comprising a radio transceiver and a control processor, said control processor comprising software means for determining a routing path of a call, for communicating with other said radio terminals, and for establishing the respective said radio terminal as a hop for other said radio terminals during a call-connection (see col. 1 lines 40-61, col. 2 lines 53-67, col. 3 lines 1-5, col. 3 lines 11-20, col. 3 lines 34-44). Van Valkenburg discloses at least one access way (22, figure 8) in operative communication with said series of remote radio terminals (see col. 3 lines 5-20, col. 9 lines 32-47). Van Valkenburg discloses a plurality of wireless routers (18-3/16, figure 8) in operative connection between said series of remote terminals and said at least one access way (see col. 9

lines 32-46, col. 5 lines 3-28, and col. 2 lines 52-61, where Van Valkenburg discloses any of the devices can be a source node or a router). Van Valkenburg discloses a method of connecting a call from a radio terminal of the ad-hoc radio system (see col. 1 lines 5-20). Van Valkenburg discloses routing the call to a said radio terminal via a said wireless router, relaying the call from the said wireless router to said at least one access way, connecting the call via said at least one gateway to another said radio terminal (see col. 9 lines 32-67, col. 10 lines 1-67, col. 1 lines 1-67, col. 3 lines 5-60, and col. 1 lines 40-67, where VanValkenburg discloses the access point is a blued tooth device and calls can be routed via any blue tooth device to another device and out over the internet to another device including a blue tooth device).

Van Valkenburg discloses an access point or access way from the wireless ad-hoc network to the wire line Internet (see col. 9 lines 65-67, col. 10 lines 1-16), however does not specifically disclose a gateway. Rautiola discloses a gateway (1, figure 1) (see col. 7 lines 17-44, col. 8 lines 60-67, and col. 9 lines 1-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Van Valkenburg, and have a gateway, as taught by Rautiola, thus allowing the nodes to be connected to the internet when they are in a hierarchical tree structure where nodes are situated under other nodes with respect to their addresses, as discussed by Rautiola (col. 3 lines 42-64).

Consider claim 37, Van Valkenburg discloses routing the call through at least one wireless router (see col. 9 lines 32-46, col. 5 lines 3-28, and col. 2 lines 52-61, where Van Valkenburg discloses any of the devices can be a source node or a router).

Consider claim 38 and 40, Van Valkenburg discloses routing a call from a wireless mobile terminal via an Internet access way where upon a recording in a table of a routing path the call from a mobile or to a mobile is routed to a terminal over the Internet (see col. 9 lines 32-67 and col. 10 lines 1-67). Van Valkenburg does not specifically disclose a gateway such that the gateway upon recording in table provides such a service that table of routing path if further exemplified. Rautiola teaches a gateway such that the gateway upon recording in table provides such a service that table of routing path if further exemplified (see col. 8 lines 60-67, col. 9 lines 1-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Van Valkenburg, and have a gateway such that the gateway upon recording in table provides such a service that table of routing path if further exemplified, as taught by Rautiola, thus allowing the nodes to be connected to the internet when they are in a hierarchical tree structure where nodes are situated under other nodes with respect to their addresses, as discussed by Rautiola (col. 3 lines 42-64).

Allowable Subject Matter

5. Claims 32-34 are allowed.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nick Corsaro whose telephone number is 703-306-5616. The examiner can normally be reached on 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A Maung can be reached on **571-272-7882**. The fax phone number for the organization where this application or proceeding is assigned is 571-272-7876.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nick Corsaro

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